



A.D. 1860, 11th APRIL. N^o 908.

S P E C I F I C A T I O N

OF

JASPER WHEELER ROGERS.

COLLECTING EXCREMENT AND
FACILITATING DRAINAGE.

L O N D O N :

PRINTED BY GEORGE E. EYRE AND WILLIAM SPOTTISWOODE,

PRINTERS TO THE QUEEN'S MOST EXCELLENT MAJESTY:

PUBLISHED AT THE GREAT SEAL PATENT OFFICE,

25, SOUTHAMPTON BUILDINGS, HOLBORN.

1860.



A.D. 1860, 11th APRIL. N° 908.

Collecting Excrement and Facilitating Drainage.

(This Invention received Provisional Protection only.)

PROVISIONAL SPECIFICATION left by Jasper Wheeler Rogers, at the Office of the Commissioners of Patents, with his Petition on the 11th April 1860.

I, JASPER WHEELER ROGERS, of Peat House, Roberts Town, in the County
5 of Kildare, Engineer, do hereby declare the nature of the said Invention for
“IMPROVED MEANS OF AND APPARATUS FOR COLLECTING THE EXCREMENT OF
TOWNS AND VILLAGES AND FOR FACILITATING THE DRAINAGE OF HOUSES,” to be
as follows:—

My Invention of improved means of and apparatus for collecting the
10 excrement of towns and villages, and for facilitating the drainage of houses,
consists of certain improvements upon an Invention having similar objects in
view, and for which I obtained Letters Patent on the 8th day of April 1857,
(No. 992.)

According to my present Invention a strong air-tight pipe of suitable
15 capacity is placed in the sewer, and is made to communicate at one end with
a large close air-tight chamber, so constructed as to admit of a vacuum being
formed therein when required. The main sewer pipe also communicates by
means of branch pipes with the waterclosets of all the houses in the district or
street through which the main sewer pipe passes. Each of these branch or
20 house pipes is provided at some convenient place with an air-tight valve by
closing which, all communication with the main sewer pipe may be tempo-
rarily suspended. The main sewer pipe is also provided at suitable places and

Rogers' Improved Mode of Collecting Excrement and Facilitating Drainage.

distances apart with air-tight valves of any convenient or suitable construction, so that the main sewer pipe may be capable of being divided into air-tight sections or compartments of convenient size simply by closing two of the air-tight valves; air-tight stand pipes, or other analogous contrivances are adapted to each section of the main sewer pipe for the purpose of communicating with the interior of the sewer pipe by means of a portable air-pump, whereby the air from the sewer pipe may be exhausted. 5

It will be understood that all the excrement and soil from the closets of the houses will pass down the branch or house pipes into the main pipe in the sewer and will be conducted by this pipe to the large vacuum chamber at the end, and where the soil will be deodorized by being mixed with peat charcoal. The liquid portion of the sewage will pass upwards throughout filtering beds made of peat charcoal and other substances, and when deprived of its gases the liquid portion may be allowed to run off. The solid matters may from time to time as they accumulate be removed from the large chambers and conveyed away. 10 15

It will be understood that by creating a vacuum in the large chamber at the end of the main sewer pipe, or in the pipe itself, all the soil and water will be drawn from the house or branch pipes towards the out-fall. Should, however a serious obstruction be found to exist in any of the branch pipes, it may be speedily removed by closing the ends of that section or compartment of the main pipe with which the obstructed house pipe communicates, and also closing all the unobstructed house pipes connected with that section of the main tube leaving the air valve of the obstructed pipe open. Then upon exhausting the air from the main tube, the atmospheric pressure will act upon the obstruction in the branch pipe from behind and will force it forward out of the main tube. It will of course be evident that instead of exhausting the main tube or any of its sections or compartments by means of an exhausting apparatus or air-pump, adapted directly thereto, the sections of the main tube may be made to communicate with a vacuum chamber placed at any convenient spot and by exhausting this latter first, and then suddenly opening a communication between it and the main tube or one of its sections or compartments, the latter with the branch pipe connected therewith will be exhausted suddenly, and any obstructions therein will be quickly removed. 20 25 30

LONDON:

Printed by GEORGE EDWARD EYRE and WILLIAM SPOTTISWOODE,
Printers to the Queen's most Excellent Majesty. 1860.